

REMARKS

Applicants hereby amend claims 1, 3, 9, 11, 12, 14, 15, 17, 22-24, 26, 27, and 32, cancel claims 30 and 34 without prejudice or disclaimer, and add new claims 36 and 37. Claims 1-29, 31-33, and 35-37 are pending in the application, with claims 1, 27, 32, and 33 being in independent form.

In the Office Action dated December 5, 2008¹, the Examiner took the following actions:

- acknowledged Applicants' priority claims under 35 U.S.C. § 119(a)-(d);
- indicated that Applicants' Preliminary Amendment has been entered;
- indicated that the Information Disclosure Statements submitted on November 21, 2005 and October 24, 2005 have been considered;
- indicated that the drawings filed October 24, 2005 have been approved;
- rejected claims 1-31, 34, and 35 under 35 U.S.C. § 101;
- rejected claims 1-8, 11-24, 27-32, 34, and 35² under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,667,695 to Pettersson et al. ("*Pettersson*");

¹ The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

² Page 4 of the Office Action indicates that only claims 1-8, 11-24, and 27-32 have been rejected as anticipated by *Pettersson*. However, at page 12 the Office Action purports to also reject claims 34 and 35 as anticipated by *Pettersson*. Applicants have responded as if claims 34 and 35 were also rejected. If Applicants' assumption is incorrect, Applicants request that the Examiner contact Applicants' representative to correct Applicants' assumption.

- indicated that claims 9, 10, 25 and 26 were objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form; and
- indicated that claim 33 is allowed.

Rejection of Claims 1-31, 34, and 35 under 35 U.S.C. § 101

The Office Action rejects claims 1-31, 34, and 35 under 35 U.S.C. § 101 because these claims allegedly do not “fall[] within one of the four statutory categories of invention.” *See* Office Action at 2. The Office Action states that “a statutory ‘process’ under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing” and also states that the claimed invention is allegedly “directed to non-statutory subject matter.” *Id.* at 2-3.

Applicants have canceled claims 30 and 34, thereby rendering the rejection of those claims moot. Applicants respectfully traverse the rejection of claims 1-29, 31, and 35 under 35 U.S.C. § 101.

Without conceding the propriety of the Office Action’s characterization of the claims, Applicants hereby amend independent claims 1 and 27 to recite a “processor-implemented method” comprising “steps performed by a processor.” Accordingly, claims 1 and 27, and their dependent claims 2-26, 28, 29, 31, and 35 clearly recite a process that is “tied to another statutory category” and as such are statutory subject matter. Thus, Applicants respectfully request withdrawal of the rejection of claims 1-29, 31, and 35 under 35 U.S.C. §101.

Rejection of Claims 1-8, 11-24, 27-32, 34, and 35 under 35 U.S.C. § 102(e)

Claims 1-8, 11-24, 27-32, 34, and 35 have been rejected as being anticipated by *Pettersson*.³ Applicants have canceled claims 30 and 34, thereby rendering the rejection of those claims moot. Applicants respectfully traverse the rejection of claims 1-8, 11-24, 27-29, 31, 32, and 35 under 35 U.S.C. § 102.

In order to establish anticipation under 35 U.S.C. § 102, the Office Action must show that each and every element as set forth in the claim is found, either expressly or inherently, in *Pettersson*. See M.P.E.P. § 2131. *Pettersson*, however, does not disclose each and every element of Applicants' claims.

Applicants' independent claim 1 recites "[a] processor-implemented method for position decoding" comprising "retrieving at least one reference position, the at least one reference position corresponding to a preceding position extracted from a prior image of the position-coding pattern" and "extracting said sequence of positions by matching information obtained from each of said images with a corresponding pattern reference area, which represents a known subset of the position-coding pattern with a given spatial relation to said reference position."

Pettersson does not disclose or suggest at least these elements of claim 1. The Office Action cites to column 15, lines 41-44 of *Pettersson* as a teaching of "retrieving at least one reference position," as was formerly recited in claim 1. See Office Action at 5. This excerpt of *Pettersson* references identifying dots in an image and fitting a raster to the dots, but does not disclose "retrieving at least one reference position, the at least one reference position corresponding to a preceding position extracted from a prior

³ See n. 2, supra.

image of the position-coding pattern” as is presently recited in Applicants’ claim 1. Nor does *Pettersson* elsewhere provide such a teaching. While *Pettersson* teaches the use of an image to perform position decoding (see *Pettersson* at col. 15, l. 15 - col. 18, l. 27), *Pettersson* does not teach or suggest the unique combination of claim 1, including “retrieving at least one reference position corresponding to a preceding position extracted from a prior image of the position-coding pattern” and “extracting said sequence of positions by matching information obtained from each of said images with a corresponding pattern reference area, which represents a known subset of the position-coding pattern with a given spatial relation to said reference position.”

Although *Pettersson* discloses “effective and correct decoding of a position code that codes a very large number of positions” (*Pettersson* at col. 3, ll. 41-43), *Pettersson* does not disclose or suggest each and every element of amended independent claim 1. Thus, *Pettersson* does not anticipate claim 1 under 35 U.S.C. § 102(e). Therefore, amended claim 1 should be allowable over *Pettersson*. Claims 2-8, 11-24, and 31 depend directly or indirectly from claim 1 and as such are allowable for at least the reasons discussed above in connection with claim 1. Although different in scope from claim 1, independent claim 32 includes similar recitations to those discussed above in connection with amended claim 1. Accordingly, claims 1-8, 11-24, 31, and 32 are not anticipated by and are allowable over *Pettersson*.

Applicants’ amended independent claim 27 recites “a processor-implemented method for position decoding” comprising, amongst other steps, “generating a probability matrix, said probability matrix containing one matrix element for each mark in said partial area, each matrix element being adapted to store either a value which

represents a most probable estimated value of its mark, or a value which represents that no value has been estimated for its mark.” *Pettersson* does not disclose or suggest at least this element of claim 27. For example, although *Pettersson* discloses the use of matrices (*see, e.g.*, col. 6, l. 32 - col. 8, l. 54), *Pettersson* does not disclose or suggest the unique combination of claim 27, including the use of a “probability matrix” where each matrix element is “adapted to store either a value which represents a most probable estimated value of its mark, or a value which represents that no value has been estimated for its mark,” much less “matching said probability matrix with information about how the position-coding pattern is composed in a pattern reference area” that is “larger than” and “including” a “partial area,” and that “defin[es] a plurality of positions,” one of which is selected as the position to be determined.

Because *Pettersson* does not disclose or suggest each and every element of amended independent claim 27, *Pettersson* does not anticipate claim 27 under 35 U.S.C. § 102(e). Therefore, amended claim 27 should be allowable over *Pettersson*. Claims 28, 29 and 35 depend directly or indirectly from claim 27. Accordingly, claims 28, 29 and 35 are not anticipated by and should be allowable over *Pettersson*.

Applicants therefore respectfully request withdrawal of the 35 U.S.C. § 102(e) rejection over *Pettersson*.

Allowable Subject Matter

Applicants thank the Examiner for the indication that claim 33 is allowed and that claims 9, 10, 25, and 26 would be allowable if rewritten in independent form. Inasmuch as claims 9, 10, 25, and 26 depend from allowable independent claim 1, for the reasons

discussed above, Applicants request that the objection to claims 9, 10, 25, and 26 be withdrawn and these dependent claims be allowed.

New claims

Applicants have added new claims 36 and 37, which are patentable at least due to their respective dependence from claim 1 and claim 32. New claims 36 and 37 are fully supported by the specification and claims of the original application including, for example, paragraph [0014] of the specification and original claim 1.

Conclusion

In view of the foregoing, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

The Examiner is requested to contact Applicants' undersigned attorneys by telephone to discuss any matters if the Examiner feels such discussions may expedite the progress of the present application toward allowance and avoid the need for further Office Actions.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account 06-0916.

Respectfully submitted,

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